

We Claim:

1. A vinyl chloride fiber consisting of a vinyl chloride resin composition, said vinyl chloride resin composition containing (a) 100 parts by mass of a vinyl chloride resin, (b) 0.2-5.0 parts by mass of a hydrotalcite thermal stabilizer, and (c) 0.2-10.0 parts by mass of an epoxy compound.

2. The vinyl chloride fiber as claimed in claim 1, wherein said epoxy compound is at least one compound selected from an epoxidized animals and plants oil, such as epoxidized soybean oil, epoxidized linseed oil, epoxidized tung oil, epoxidized fish oil, epoxidized beef tallow oil, epoxidized castor oil and epoxidized safflower oil, and epoxy-containing methacrylic acid compound, epoxidized methyl stearate, epoxidized polybutadiene, tris (epoxy propyl) isocyanurate, epoxidized tallol oil fatty ester, epoxidized linseed oil fatty ester, vinylcyclohexene diepoxide, dicyclohexene carboxylate, diglycidyl ether of bisphenol A, glycerin polyglycidyl eter, and cyclohexane dimethanol polyglycidyl eter.

3. The vinyl chloride fiber as claimed in claim 1 or 2, wherein said vinyl chloride resin composition compound contains (d) 0.01-2.0 parts by mass of a nitrogen-containing polyol.

4. The vinyl chloride fiber as claimed in claim 3, wherein said nitrogen-containing polyol is tris (2-hydroxyethyl) isocyanurate, tris (3-hydroxypropyl) isocyanurate, or tris (4-hydroxybutyl) isocyanurate.

5. A method of manufacturing a vinyl chloride fiber, comprising the steps of:

forming a vinyl chloride resin composition with (a) 100 parts by mass of a vinyl chloride resin, (b) 0.2-5.0 parts by mass of a hydrotalcite thermal stabilizer, and (c) 0.2-10.0 parts by mass of an epoxy compound; and

melt spinning said vinyl chloride resin composition at a temperature of 170-190°C.

6. The method as claimed in claim 5, further comprising the steps of:  
stretching said vinyl chloride fiber melt spun to 2 to 4 times at a temperature of 90-120°C in air; and  
relaxing the vinyl chloride fiber stretched at a temperature of 110-140°C in air until a length thereof becomes 60-100% prior to the heat treatment.
7. The method as claimed in claim 5 or 6, wherein said vinyl chloride resin composition contains (d) 0.01-2.0 parts by mass of a nitrogen-containing polyol.